Use Attainability Analysis

for

WBID 0865 Flat Creek

Submitted by
Tetra Tech, Inc

To
Missouri Department of Natural Resources
Water Protection Program

Field Data Sheets for Recreational Use Stream Surveys

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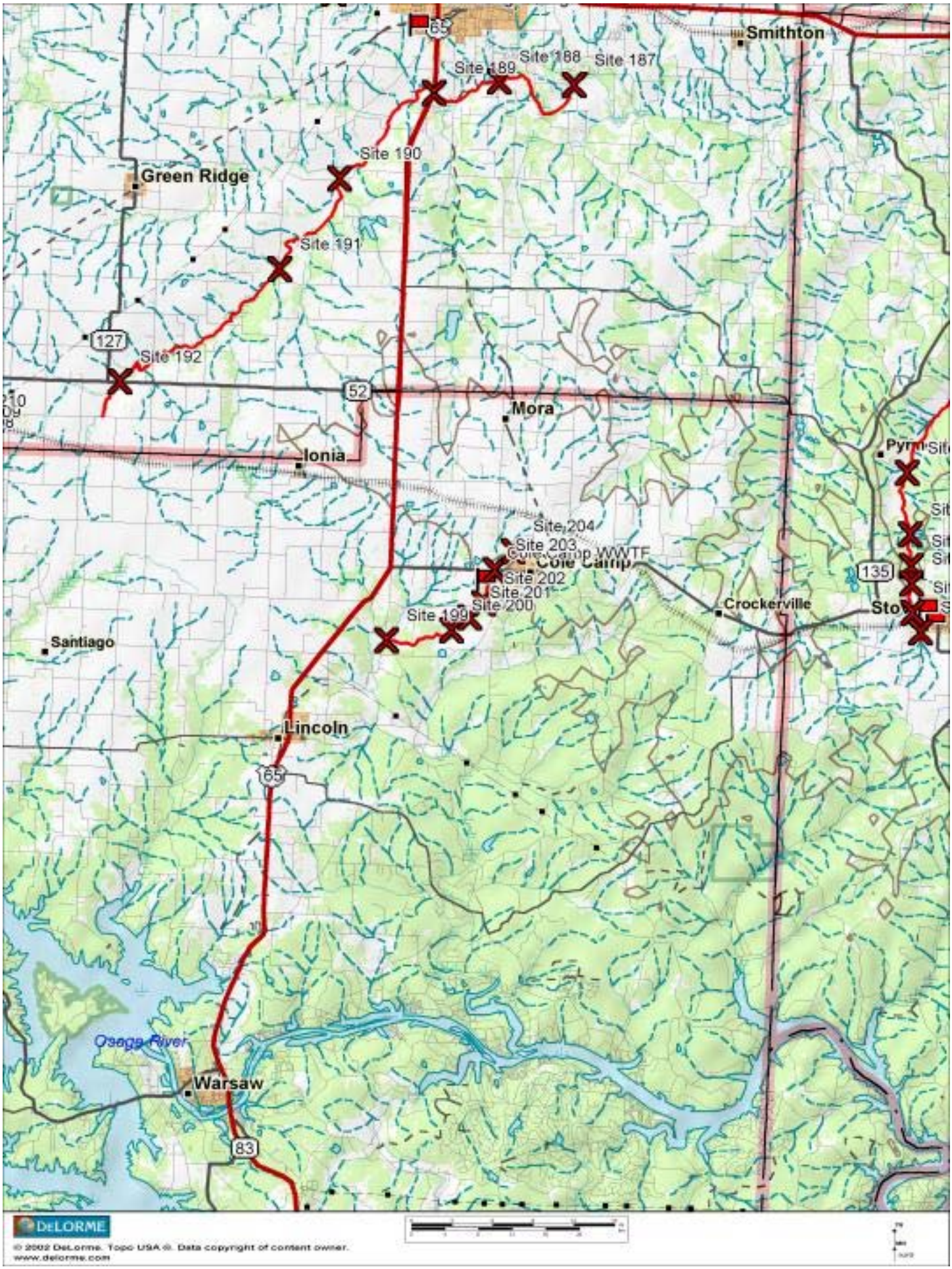
Data Sheet A - Water Body Identification

Water Body Name: (from USGS 7.5' quad)	FLAT CREEK (187-192)
8-digit HUC:	10300103
Missouri WBID #:	0865
County:	PETTIS COUNTY
Upstream Legal Description:	
Downstream Legal Description:	
Upstream Coordinates: (UGS 84, ddd.ddddd)	N38.53901 W093.41805 Upstream most part of segment
Downstream Coordinates: (UGS 84, ddd.ddddd)	N38.66263 W093.18038 DS most
Discharger Facility Name(s):	CAMBRIDGE VILLAGE
Discharger Permit Number(s):	
Number of Sites Evaluated:	6
Name of Surveyor and Telephone Number:	CHAD BARBOUR, 410-356-8993
Organization:	TETRA TECH INC.
Position:	ASSOCIATE SCIENTIST

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** 04/21/05


Smithton
Site 187
Site 188
Site 189
Site 190
Green Ridge
Site 191
127
Site 192
52
Mora
Ionia
Site 204
Site 203
Cole Camp WWTF
Cole Camp
Site 202
Site 201
Site 200
Site 199
135
Crockerville
Santiago
Lincoln
65
Osage River
Warsaw
83
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#7

Date: 21 Apr 05 Site identifier: 187 Flat Creek

Field Audit Checklist

Field work for Use Attainability Analysis for Contact Recreational Beneficial Use in Missouri

Overview

This checklist documents observations by an auditor (not from the State of Missouri) for field work performed according to "Recreational Use Attainability Analysis Protocol", Missouri Department of Natural Resources, Water Protection Program, November 3, 2004, and, "Field Data for Use Attainability Analysis (UAA)s for Contact Recreation Beneficial Use in Missouri", Tetra Tech, March 8, 2005. The purpose of the audit is to document the extent to which the field team follow the procedures in the protocol and the QAPP. The auditor does not perform simultaneous activities specified in the protocol and the QAPP for the purpose of comparing results obtained by the auditor and the field team. The field work is conducted here under Contract No. EP-C-04-030, Work Assignment No. B-15.

Procedure

The auditor arranges with the field workers to meet and accompany the field team for one or more site visits. When the auditor first meets the field team on the day of the field audit, the auditor provides the field team with a copy of this checklist. The auditor accompanies the field team to one or more site visits scheduled for the day. At each site, the auditor observes the work of the field team, and marks this checklist as events are observed. A new checklist is completed for each different site visited and audited. At the end of each site visit, both the field team and the auditor sign and date this checklist, attesting that this audit was performed as represented by this checklist and the markings thereon. After the day's work is complete, the auditor provides xerox copies of the completed checklists to a designated representative of the field team, and sends the original completed checklists to the State of Missouri.

Checklist

Date: 21

Time of arrival at site: 2:34

Identifier of site: 187

1. (Protocol pg. 16) Does the field team have a 7.5 minute USGS topographic quadrangle map for the location of this site? eLorme missouri

2. (Protocol pg. 16) Does the field team measure and record location of the site using a GPS unit? yes

3. (Protocol pg. 16) Are the GPS location data recorded in UTM, NAD 83? degree minute record

4. (Protocol pg. 16) Are the start and end points(upstream and downstream coordinates) recorded on Data Sheet A? [illegible] point

5. (Protocol pg. 16) Are the narrative site assessments recorded on the forms provided in the protocol? yes

6. (Protocol pg. 16) Is information for this site recorded on a new form? yes

7. (protocol pg. 16) Is a photographic record made of this site? yes

8. (Protocol pg. 16) Do the photographs include an upstream view and a downstream view? yes

9. (Protocol pg. 16) If the team discovers evidence of observed or potential use, is a photograph taken documenting the evidence? yes

10. (Protocol pg. 16) Are the photographs catalogued in the field notes in a manner that indicates
    - site location? yes
    - date? yes
    - view orientation? yes
    - what is being shown? yes

11. (Protocol pg. 16) If people are present, does the field team interview the people? NA

12. (Protocol pg 16) If an interview occurs, does the field team obtain and record in the field notes
    - history of the water body? NA
    - legal name of person interviewed?
    - address of person interviewed?

13. (Protocol) At the end of the site observation, is Data Sheet A (one sheet) completed and signed? yes

14. (Protocol) At the end of the site observation, is Data Sheet B (two sheets) completed and signed? yes

15. (QAPP pg 13) Does the field team have a list of equipment and expendable supplies? yes

16. (QAPP pg 13) Does the field team have backup equipment? no

17. (QAPP pg 13) Have any battery-powered equipment been fully charged? yes

18. (QAPP pg 14) If the field team notices any deviations from the planned survey, does the field team record the deviations on the field forms? yes

19. (QAPP pg 14) Are all entries made in ink with no erasures? yes

20. (QAPP pg 14) Are any incorrect entries crossed out with a single strike mark, initialed and dated? yes

21. (QAPP pg 14) Are all field data sheets filled out completely? yes

22. (QAPP pg 14-15) Are the completed field sheets signed? yes

23. (QAPP pg 15) Is this a replicate visit (for precision of field measurements)? no

24. (QAPP pg 15) If evidence of recreation use is obvious, do the Field Team Leader and the Field QC Officer agree? yes

25. (QAPP pg 18) Does the field team have documentation or other evidence that the measurement equipment is in working order? yes

26. (QAPP pg 19) Does the field team have documentation or other evidence that the GPS unit has been checked for accuracy? no

Signatures

We, the undersigned, hereby affirm, to the best of our knowledge, that this audit occurred and that the marking on this checklist accurately represent the audit results.

Auditor: Don P Miller 21 apr 05

Field Team member 1: [signature] 04/21/05

Field Team member 2: Elizabeth Lee Yarbrough 4-21-05

Field Team member 3:

Field Team member 4:

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Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 187	Site Location Description: Rt M overpass
Site GPS Coordinates: N38.666263 W093.186138 (Acc 18.6ft)	
Date & Time: 4-21-2005 2:34 PM	Facility Name: Cambridge Village
Personnel: CB, ELY	Permit Number:
Current Weather Conditions: Partly Cloudy 78	Weather Conditions for Past 7 days:
Photo Ids: Upstream: ~~1766A~~ 042 (cds) Downstream: ~~1765A~~ 041 (cds)	Other: Footpath ~~1767A~~ 043 (as)

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Visual estimate due to width & depth. The stream was deeper than 3m. It was unsafe to enter stream due to depth.

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☒ No trespass sign	☒ Fence	☒ Steep slopes	☐ Other:	

Evidence of Human Use*:

☒ Roads	☒ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Rope swings	☐ Camping Sites	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle
☒ Other: Footpath				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Page Two – Data Sheet B for WBID # 187 : *Visual Estimate due to width & Depth

Stream Morphology:

Upstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Run	Width (ft): EY 47 m	Length (ft): EY 20 m	Avg. Depth (ft): *	Max. Depth (ft): * >3m
☐ Pool	Width (ft): ~~47 m~~ EY 4-21-2005	Length (ft): ~~20 m~~ EY 4-21-2005	Avg. Depth (ft): *	Max. Depth (ft): *
☐ Flow	Present? ☒ Yes ☐ No		Estimated (ft³/sec): Unable *	

Downstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft): EY 47m	Length (ft): EY 20m	Avg. Depth (ft): *	Max. Depth (ft): * >3m
☐ Pool	Width (ft): ~~47m~~ EY 4-21-05	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Flow	Present? ☒ Yes ☐ No		Estimated (ft³/sec): Unable *	

Substrate*: (These values should add up to 100%.) visable shoreline unable due to width & depth to do the substrate & depth.

0 % Cobble	0 % Gravel	0 % Sand	50 % Silt	50 % Mud/Clay	0 % Bedrock

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

None visable

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☐ Clear	☒ Green	☐ Gray	☒ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** 04/21/05

Organization: TETRA TECH INC. Position: ASSOCIATE SCIENTIST

CdY 4-21-05


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Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

ACC 17.5 Ft.

Missouri WBID #: 188	Site Location Description: Rt U at bridge
Site GPS Coordinates: N38.66419 W093.21955	
Date & Time: 4-21-2005 3:17 PM	Facility Name: Cambridge Village
Personnel: CB ELY	Permit Number:
Current Weather Conditions: Partly Cloudy 85°	Weather Conditions for Past 7 days:
Photo Ids: Upstream: ~~1768A~~ 044 CC9 / Downstream: ~~1769A~~ 045 CC10	Other: ROAD ~~1770A~~ 046 CW, Fishing ~~1771A~~ 047 CC6

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Visual estimate due to width & depth. Greater than 3m deep and unsafe to enter stream, due to depth

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☐ Fence	☒ Steep slopes	☐ Other:	

Evidence of Human Use*:

☑ Roads	☑ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Rope swings	☐ Camping Sites	☐ Fire pit/ring	☐ NPDES Discharge	☒ Fishing Tackle
☐ Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Page Two – Data Sheet B for WBID # 188 : * Visual estimate due to depth & width

Stream Morphology:

Upstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft): EV 34m	Length (ft): EV 20m	Avg. Depth (ft): cant tell depth due to turbid H2O**	Max. Depth (ft): > 3m
☐ Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Flow	Present? ☒ Yes ☐ No		Estimated (ft³/sec):	

Downstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft): EV 34m	Length (ft): EV 20m	Avg. Depth (ft): **	Max. Depth (ft): 73m
☐ Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Flow	Present? ☒ Yes ☐ No		Estimated (ft³/sec):	

Substrate*: (These values should add up to 100%.) Visual Assessment

5	% Cobble	0	% Gravel	0	% Sand	40	% Silt	45	% Mud/Clay	0	% Bedrock

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Reedy aquatic Plants Some Algae

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☐ Clear	☐ Green	☐ Gray	☒ Milky	☒ Other: Brown
Bottom Deposit:	☐ Sludge	☐ Solids	☐ Fine sediments	☐ None	☐ Other: * unable to determine due to depth
Surface Deposit:	☒ Oil	☒ Scum	☐ Foam	☐ None	☐ Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** 04/21/05

Organization: Tetra Tech Inc. **Position:** Associate Scientist

CLY 4-21-05


1811


1812

Page Two – Data Sheet B for WBID # 189 **:**

Stream Morphology:

Upstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): EY 30m	Length (ft): EY 20m	Avg. Depth (ft): unable to determine turbid H_2O **	Max. Depth (ft): EY >3m
☒ Flow	Present? ☐ Yes ☒ No		Estimated (ft^3/sec):	

Downstream View Physical Dimensions:

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): EY 30m	Length (ft): EY 20m	Avg. Depth (ft): * *	Max. Depth (ft): EY >3m
☒ Flow	Present? ☐ Yes ☒ No		Estimated (ft^3/sec):	

Substrate*: (These values should add up to 100%.) Unable to assess due to turbidity

% Cobble	% Gravel	% Sand	% Silt	% Mud/Clay	% Bedrock

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

NONE

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☐ Clear	☐ Green	☐ Gray	☒ Milky	☒ Other: Brown
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☒ Scum	☐ Foam	☐ None	☐ Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: Chris M **Date:** 04/21/05

Organization: TETRA TECH INC. Position: ASSOCIATE SCIENTIST

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Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 189		Site Location Description:
Site GPS Coordinates: N 38.66011 W093.25353 (Acc 18.5ft)		♡65 @ Bridge
Date & Time: 4-21-05 340 PM		Facility Name: Cambridge Village
Personnel: CB ELY		Permit Number:
Current Weather Conditions: 83°F, OVERCAST		Weather Conditions for Past 7 days:
Photo Ids: Upstream: ~~1772A~~ 048 (CB)	Downstream: ~~1773A~~ 049 (CB)	Other:

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

* Visual Assessment due to width & depth
Greater than 3m deep and unsafe to enter stream due to depth.

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☒ Fence	☒ Steep slopes	☐ Other:	

Evidence of Human Use*:

☒ Roads	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Rope swings	☐ Camping Sites	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle
☐ Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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189U


189D

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Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

AQ 16.8 FL

Missouri WBID #: 190	Site Location Description: R+F (the road goes right through the stream)
Site GPS Coordinates: N38.62375 W093.30293	
Date & Time: 4-21-05 - 4:12 PM	Facility Name: Cambridge Village
Personnel: CB, ELY	Permit Number:
Current Weather Conditions: Mostly Cloudy 82°	Weather Conditions for Past 7 days:
Photo Ids: Upstream: ~~IMG_7744~~ 050 COP	Downstream: ~~IMG_7745~~ 051 COS	Other:

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☐ None of the above	☒ Other: Skipping stones

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Jeremy 2302 Sothio Sedalia — Canoeing the Flat Creek Checking water level — Jeremy was there checking the water level and ~~told~~ said he canoes on the river.

Kevin Rohr 20451 Morgan Rd Green Ridge MO — Swimming & Fishing Saw a boat — Kevin Rohr has seen people boating on the river. He and his children fish and swim there as well as some kids from the neighborhood.

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☒ No trespass sign	☐ Fence	☒ Steep slopes	☐ Other:	

Evidence of Human Use*:

☒ Roads	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☒ RV / ATV Tracks
☐ Rope swings	☐ Camping Sites	☐ Fire pit/ring	☐ NPDES Discharge	☒ Fishing Tackle
☐ Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Page Two – Data Sheet B for WBID # 190 **:**

Stream Morphology:

Upstream View Physical Dimensions: in meters; 0.20, 0.36, 0.70, 0.90, 0.70

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): EV 28 m	Length (ft): EV 20m	Avg. Depth (ft): EV 0.572 m	Max. Depth (ft): EV 0.90 m
☒ Flow	Present? ☐ Yes ☒ No		Estimated (ft³/sec):	

Downstream View Physical Dimensions: in meters 0.22, 0.20, 0.40, 0.40, 0.28

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): EV 20 m	Length (ft): EV 20m	Avg. Depth (ft): EV 5.016 m	Max. Depth (ft): EV 0.40m
☒ Flow	Present? ☐ Yes ☒ No		Estimated (ft³/sec):	

Substrate*: (These values should add up to 100%.)

75	% Cobble	10	% Gravel	0	% Sand	5	% Silt	10	% Mud/Clay		% Bedrock

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Moderate amount of algae

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☐ Other:
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☒ Scum	☐ Foam	☐ None	☐ Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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Signed: _____ **Date:** 04/21/05

Organization: TETRA TECH INC. Position: ASSOCIATE SCIENTIST

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Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

Missouri WBID #: 191		Site Location Description: RTE @ over pass
4CC27.5 Site GPS Coordinates: N38.5851 W93.33437		
Date & Time: 4-21-05 450 PM CDT		Facility Name: Cambridge Village
Personnel: CB ELY		Permit Number:
Current Weather Conditions: Cloudy 83°		Weather Conditions for Past 7 days:
Photo Ids: Upstream: ~~1776~~ A 052 CB	Downstream: ~~1777~~ A 053 CB	Other:

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Declined Names & address Kids use occasionally but not often for play, wading & Fishing Interviewed a couple passing by.

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☒ Fence	☒ Steep slopes	☐ Other:	

Evidence of Human Use*:

☒ Roads	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Rope swings	☐ Camping Sites	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle
☐ Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

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Page Two – Data Sheet B for WBID # 191 **:**

Stream Morphology:

Upstream View Physical Dimensions: in meters: 0.26, 0.32, 0.28, 0.24, 0.10

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):	
☒ Run	Width (ft): 14 m	Length (ft): 20m	Avg. Depth (ft): 0.24m	Max. Depth (ft): 0.32m	
☐ Pool	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):	
☑ Flow	Present? ☑ Yes ☐ No		3 m Estimated (ft³/sec): 21s 23s 20s 20s	= 0.14 m/s	

Downstream View Physical Dimensions: 0.30, 0.52, 0.54, 0.56, 0.32

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):	
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):	
☒ Pool	Width (ft): 13 m	Length (ft): 15m 20m	Avg. Depth (ft): 0.448m	Max. Depth (ft): 0.56m	
☒ Flow	Present? ☐ Yes ☒ No		Estimated (ft³/sec):		

Substrate*: (These values should add up to 100%.)

20	% Cobble	65	% Gravel	0	% Sand	7	% Silt	8	% Mud/Clay	0	% Bedrock

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Algae

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☒ Clear	☐ Green	☐ Gray	☐ Milky	☒ Other: Brown
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☒ Oil	☒ Scum	☒ Foam	☐ None	☐ Other:

Comments: Please attach additional comments (including information from interviews) to this form.

*This information is not to be used solely for removal of a recreational use designation but rather is to provide a more comprehensive understanding of water conditions. Consequently, this information is not intended to directly influence a decision on the recreation use analysis but may point to conditions that need further analysis or that effect another use.

I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: _____ **Date:** 04-21-05

Organization: Tetra Tech Inc. Position: Associate Scientist

EJY 4-21-2005


191U


191D

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WATER PROTECTION PROGRAM

Field Data Sheets for Recreational Use Stream Surveys

Data Sheet B - Site Characterization

(A separate data sheet must be completed for each site)

ACC 20.4 F6.

Missouri WBID #: 192	Site Location Description: Rt 52 @ overpass
Site GPS Coordinates: N 38.53901 W093, 41805	
Date & Time: 4-21-2005 6:02	Facility Name: Cambridge Village
Personnel: CB ELY	Permit Number:
Current Weather Conditions: Cloudy 75°	Weather Conditions for Past 7 days:
Photo Ids: Upstream: ~~1779A~~ 055 C20	Downstream: ~~1778A~~ 054 C19 Other:

Uses Observed*:

☐ Swimming	☐ Skin diving	☐ SCUBA diving	☐ Tubing	☐ Water skiing
☐ Wind surfing	☐ Kayaking	☐ Boating	☐ Wading	☐ Rafting
☐ Hunting	☐ Trapping	☐ Fishing	☒ None of the above	☐ Other:

Describe: (include number of individuals recreating, frequency of use, photo-documentation of evidence of recreational uses, etc.)

Pool @ the X site 1.3 meters deep (Extra Data from reach)

Surrounding Conditions*: (Mark all that promote or impede recreational uses. Attach photos of evidence or unusual items of interest.)

☐ City/county parks	☐ Playgrounds	☐ MDC conservation lands	☐ Urban areas	☐ Campgrounds
☐ Boating accesses	☐ State parks	☐ National forests	☐ Nature trails	☐ Stairs/walkway
☐ No trespass sign	☒ Fence	☒ Steep slopes	☐ Other:	

Evidence of Human Use*:

☒ Roads	☐ Foot paths/prints	☐ Dock/platform	☐ Livestock Watering	☐ RV / ATV Tracks
☐ Rope swings	☐ Camping Sites	☐ Fire pit/ring	☐ NPDES Discharge	☐ Fishing Tackle
☐ Other:				

Site Locations Map(s): Attach a map of entire segment with assessment sites clearly labeled. Mark any other items that may be of interest. (Include photographs)

*Some of this information is not intended to directly influence a decision on any one particular recreational use analysis but may point to conditions that need further analysis or that effect another use.

Page Two – Data Sheet B for WBID # 192 :

Stream Morphology:

Upstream View Physical Dimensions: in meters: 0.62, 0.76, 0.76, 0.62, 0.72

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): EY 7.8 m	Length (ft): EY 20m	Avg. Depth (ft): EY 0.696m	Max. Depth (ft): EY 0.76m
☒ Flow	Present? ☐ Yes ☒ No		Estimated (ft³/sec):	

Downstream View Physical Dimensions: in meters: 1.45m, 1.35, 1.12, 0.76, 0.24

☐ Riffle	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☐ Run	Width (ft):	Length (ft):	Avg. Depth (ft):	Max. Depth (ft):
☒ Pool	Width (ft): EY 13.2 m	Length (ft): EY 20m	Avg. Depth (ft): EY 0.984m	Max. Depth (ft): EY 1.45m
☒ Flow	Present? ☐ Yes ☒ No		Estimated (ft³/sec):	

Substrate*: (These values should add up to 100%.)

35	% Cobble	50	% Gravel	0	% Sand	7	% Silt	8	% Mud/Clay	0	% Bedrock

Aquatic Vegetation*: (note amount of vegetation or algal growth at the assessment site)

Algae

Water Characteristics*: (Mark all that apply.)

Odor:	☐ Sewage	☐ Musky	☐ Chemical	☒ None	☐ Other:
Color:	☐ Clear	☐ Green	☐ Gray	☒ Milky	☒ Other: Brown
Bottom Deposit:	☐ Sludge	☐ Solids	☒ Fine sediments	☐ None	☐ Other:
Surface Deposit:	☐ Oil	☐ Scum	☐ Foam	☒ None	☐ Other:

Comments: Please attach additional comments (including information from interviews) to this form.

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I, the undersigned, hereby affirm to the best of my knowledge, that all information reported on this UAA datasheet is true and accurate.

Signed: [signature] **Date:** 04-21-05

Organization: Tetra Tech Inc. Position: Associate Scientist

EJY 4-21-2005


192 U


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